Pace Analytical Services, LLC
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

March 27, 2017

Dave Blye
Environmental Standards, Inc.
1140 Valley Forge Road
PO Box 810
Valley Forge, PA 19482

RE: Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Dear Dave Blye:
Enclosed are the analytical results for sample(s) received by the laboratory on March 09, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carol Davy
carol.davy@pacelabs.com
1(612)607-6436
Project Manager

Enclosures

cc: Meg Michell, Environmental Standards, Inc.

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CERTIFICATIONS

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: UST-078
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas Certification #: 88-0680
California Certification #: MN00064
CNMI Saipan Certification #:MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia WW Certification #: 382
Wisconsin Certification #: 999407970
Wyoming via EPA Region 8 Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10381359001	**OWS-WAFO-T170308130045**	Water	03/08/17 11:20	03/09/17 09:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10381359001	**OWS-WAFO-T170308130045**	SM 2540D	NAS	1	PASI-M

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PROJECT NARRATIVE

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Method: **SM 2540D**
Description: 2540D TSS, Low Level
Client: Anchor QEA, LLC
Date: March 27, 2017

General Information:
1 sample was analyzed for SM 2540D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 463449

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

- LCS (Lab ID: 2533733)
  - Total Suspended Solids

R1: RPD value was outside control limits.

- LCSD (Lab ID: 2533734)
  - Total Suspended Solids

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 463449

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

- OWS-WAFO-T170308130045 (Lab ID: 10381359001)
  - Total Suspended Solids

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Sample: OWS-WAFO-T170308130045 **Lab ID: 10381359001** Collected: 03/08/17 11:20 Received: 03/09/17 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2540D TSS, Low Level	Analytical Method: SM 2540D								
Total Suspended Solids	**3.9**	mg/L	1.0	0.50	1		03/13/17 15:26		L1,P2

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

QC Batch: 463449
QC Batch Method: SM 2540D
Analysis Method: SM 2540D
Analysis Description: 2540D TSS, Low Level
Associated Lab Samples: 10381359001

METHOD BLANK: 2533732 Matrix: Water
Associated Lab Samples: 10381359001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Suspended Solids	mg/L	<1.0	1.0	0.50	03/13/17 15:26	

LABORATORY CONTROL SAMPLE & LCSD: 2533733 2533734

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Total Suspended Solids	mg/L	100	406	94.0	406	94	80-120	125	10	L1,R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
P2	Re-extraction or re-analysis could not be performed due to insufficient sample amount.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hudson River Remedial Action M
Pace Project No.: 10381359

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10381359001	**OWS-WAFO-T170308130045**	SM 2540D	463449		

10381359

ANCHOR QEA

305 West Grand Avenue Montvale, NJ 07645 Ph: 201-930-9890

Client: General Electric Company

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

Project: Hudson River Remedial Action Monitoring Program - Resuspension Monitoring

COC ID: COC170308130541PACE
Sample Custodian: KMB
Lab: PACE

COC Sample Number	Field Sample ID	QA/QC	Matrix **	Date Collected	Time Collected	Media*	# Containers	TEST REQUESTED	METHOD	MS	MSD	LD	Turn Around Time (hrs)	Preservative
001	OWS-WAFO-T170308130045	ENV	W	03/08/2017	11:20	W	3	[redacted]						
								Total Suspended Solids	SM 2540D	N	N	N	480	4degC
								CS PCBs	NE294_02	N	N	N	480	4degC

001

*TSS only sent 3/8/17

Comments: T=1.1°C

Relinquished by:	Received by:	Relinquished by:	Received by:	Relinquished by:	Received by:
Signature [signature]	Signature [signature]	Signature [signature]	Signature [signature] T: 3.8°C	Signature [signature] VIA FEDEX →	Signature [signature]
Print Name C. Yates	Print Name M Brooks	Print Name M Brooks	Print Name A. Bittig	Print Name A Bittig	Print Name Kayla Lecman
Company AQ	Company PACE	Company PACE	Company PACE	Company PACE	Company Pace
Date/Time 3/8/17 1300	Date/Time 3/8/17 1400	Date/Time 3/8/17 1440	Date/Time 3/8/17 14:40	Date/Time 3/8/17 16:00	Date/Time 3/9/17 09:45

Date Printed: 3/8/2017 * S= SEDIMENT, W= WATER, PW= PORE WATER ** W = Total/Whole, D = Dissolved, R = Residue, S = Sediment **Page 1 of 1**

Pace Analytical®	Document Name: **Sample Condition Upon Receipt Form**	Document Revised: 19Dec2016 Page 1 of 2
	Document No.: **F-MN-L-213-rev.20**	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Anchor QEA

Project #: WO# : 10381359

10381359

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client
☐ Commercial ☐ Pace ☐ SpeeDee ☐ Other:

Tracking Number: 7145 4771 6966

Custody Seal on Cooler/Box Present? ☑ Yes ☐ No **Seals Intact?** ☑ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☐ Yes ☒ No

Thermometer Used: ☑ 151401163 ☐ 151401164

Type of Ice: ☑ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 1.0 **Cooler Temp Corrected (°C):** 1.1 **Biological Tissue Frozen?** ☐ Yes ☐ No ☒ N/A

Temp should be above freezing to 6°C **Correction Factor:** +0.1 **Date and Initials of Person Examining Contents:** KH 3.9.17

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present?	☑ Yes	☐ No		1.
Chain of Custody Filled Out?	☑ Yes	☐ No		2.
Chain of Custody Relinquished?	☑ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☐ Yes	☐ No	☒ N/A	4.
Samples Arrived within Hold Time?	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☑ No		6.
Rush Turn Around Time Requested?	☐ Yes	☑ No		7.
Sufficient Volume?	☑ Yes	☐ No		8.
Correct Containers Used?	☑ Yes	☐ No		9.
-Pace Containers Used?	☑ Yes	☐ No		
Containers Intact?	☑ Yes	☐ No		10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	☑ Yes	☐ No		12.
-Includes Date/Time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation have been checked?	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH Positive for Res. Chlorine? Y N
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)	☐ Yes	☐ No	☒ N/A	Sample #
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin.	☐ Yes	☐ No	☒ N/A	Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

PCB sample not received in Minneapolis

Project Manager Review: Carol Doug **Date:** 3/10/17

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers).

Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 10381359

Table Of Contents

SAMPLE NO.

OWS-WAFO-T170308130045

FORM I INORGANIC-1

INORGANIC ANALYSIS DATA SHEET

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action

Lab Sample ID: 10381359001 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Suspended Solids	3.9		mg/L	1	03/13/2017 15:26

FORM III INORGANIC-1

BLANKS

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract : Hudson River Remedial Action M

Method Blank Matrix: Water Instrument ID: 10WET4

Method Blank Concentration Units: mg/L

Analyte	Initial Calibration Blank		Continuing Calibration Blank						Method Blank	
		C		C		C		C	2533732	C
Total Suspended Solids									<1.0	U

SAMPLE NO.

2533734LCSD

FORM VI INORGANIC-1
DUPLICATES

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action

Matrix: Water Concentration Units: mg/L

Percent Moisture: _____ Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Suspended Solids	10	406	94.0	125*

* RPD outside QC Limits

SAMPLE NO.

2533733LCS

FORM VII INORGANIC-1
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Suspended Solids	mg/L	100	406	406*	80	120

SAMPLE NO.

2533734LCSD

FORM VII INORGANIC-2
LABORATORY CONTROL SAMPLE

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action

Matrix: Water

Analyte	Units	True	Found	%R	Limits	
Total Suspended Solids	mg/L	100	94.0	94	80	120

FORM IX INORGANIC-1
METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action M

Preparation Method: SM 2540D Instrument ID: 10WET4

Concentration Units: mg/L

Analyte	PQL	MDL	MDL Date
Total Suspended Solids	2.0	1.0	04/01/2015

FORM XII INORGANIC-1
PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action M

Preparation Method: SM 2540D Batch: WET 52510

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2533732	2533732	03/13/2017	1000	500
2533733	2533733	03/13/2017	1000	500
2533734	2533734	03/13/2017	1000	500
10381359001	OWS-WAFO-	03/13/2017	1000	500

FORM XIII INORGANIC-1

ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10381359 Contract: Hudson River Remedial Action M

Instrument ID: 10WET4 Analysis Method: SM 2540D

Start Date: 03/13/2017 15:26 End Date: 03/13/2017 15:26

Sample Name	Lab Sample ID	D/F	Date	Time	tssw
2533732BLANK	2533732	1	03/13/2017	15:26	X
2533733LCS	2533733	1	03/13/2017	15:26	X
2533734LCSD	2533734	1	03/13/2017	15:26	X
OWS-WAFO-	10381359001	1	03/13/2017	15:26	X

Prep Log Report

Batch Information: WET 52510 TSS LL

Template Version: F-MN-I-326-Rev.03 (24Jan2017)

Analysis Method	SM 2540D	Analyzed By	NAS	Instrument	10WET4	Acceptance Range:	103-105 C
Oven ID	10WET77	Thermometer ID	2113652	Oven Temp Correction Factor	-1	Oven Temp In1 | Corr | Date/Time | Init	103.0 | 102.0 | 03/13/2017 15:26 | NAS
Oven Temp Out1 | Corr | Date/Time | Init	104.0 | 103.0 | 03/14/2017 08:41 | NAS	Desic. In 1 ID | Date/Time | Init	4 | 03/14/2017 08:41 | NAS	Desic. Out 1 Date/Time | Init	03/14/2017 09:38 | NAS	Oven Temp In2 | Corr | Date/Time | Init	103.0 | 102.0 | 03/14/2017 09:42 | NAS
Oven Temp Out2 | Corr | Date/Time | Init	104.0 | 103.0 | 03/14/2017 10:53 | NAS	Desic. In 2 ID | Date/Time | Init	4 | 03/14/2017 10:53 | NAS	Desic. Out 2 Date/Time | Init	03/14/2017 11:24 | NAS	Reviewed By	KEO
Reviewed By Date	03/15/2017 14:36	Batch Notes					

Sample Information:

QC Rule	Sample Type	Lab Sample ID	Select	ID	TSS Final (mg/L)	TSS Posted (mg/L)	Run Date/Time	Initial Volume (mL)	TSS Filters ()	Filter Wt 1 (g)	Filter Use 1	Oven Wt 1 (g)	Oven Use 1	Oven Wt 2 (g)
2540D WLL	BLANK	**2533732**	Y	cHIH9	-0.20000	-0.40000	03/13/2017 15:26	1000	111398 ()	0.1171	M	0.1170	N	0.1169
2540D WLL	LCS	**2533733**	Y	cHIHA	405.90	811.80	03/13/2017 15:26	1000	111398 ()	0.1159	M	0.5219	N	0.5218
2540D WLL	LCSD	**2533734**	Y	cHIHB	94.000	188.00	03/13/2017 15:26	1000	111398 ()	0.1164	M	0.2100	N	0.2104
2540D WLL	PS	**10381359001**	Y	cHIHC	3.9000	7.8000	03/13/2017 15:26	1000	111398 ()	0.1157	M	0.1195	N	0.1196

QC Rule	Sample Type	Lab Sample ID	Oven Use 2	Oven %Diff 1&2	Oven Wt Diff 1&2	Sample Notes	TS/TDS-SPK (mL)
2540D WLL	BLANK	**2533732**	Y	66.667	0.0001		
2540D WLL	LCS	**2533733**	Y	0.024634	0.0001		112198 (50)
2540D WLL	LCSD	**2533734**	Y	0.42644	0.0004		112198 (50)
2540D WLL	PS	**10381359001**	Y	2.5974	0.0001		

Standard Notes:

112198: TS/TSS/TDS Handmade Standard, Used